

Abstract of the Disclosure

Described is a level shifting device for high-frequency operation. The level shifting device includes first through fifth transistors. The first transistor has its gate connected to an input signal, its source connected to the voltage node at an lower voltage value, and its drain connected to an output signal. The second transistor has its gate connected to an inverted version of the input signal, its source connected to the voltage node at the lower voltage value, and its drain connected to an inverted version of the output signal. The third transistor has its gate connected to the drain of the second transistor and its drain connected to the drain of the first transistor. The fourth transistor has its gate connected to the drain of the first transistor, its drain connected to the drain of the second transistor, and its source connected to the voltage supply at an first upper voltage value. The fifth transistor has its gate connected to the input signal, its source connected to the voltage supply at the first upper voltage value, and its drain connected to the source of the third transistor. The input signal swings between a second upper voltage value and the lower voltage value and the output signal swings between the first upper voltage value and the lower voltage value.